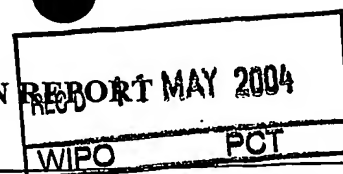


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference M80451060:RLM:tmc	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/AU2003/000049	International Filing Date (day/month/year) 16 January 2003	Priority Date (day/month/year) 17 January 2002
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ B01D 15/08, G01N 30/60		
Applicant SGE INTERNATIONAL PTY LTD et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
 These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

I	<input checked="" type="checkbox"/>	Basis of the report
II	<input type="checkbox"/>	Priority
III	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
IV	<input type="checkbox"/>	Lack of unity of invention
V	<input checked="" type="checkbox"/>	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
VI	<input type="checkbox"/>	Certain documents cited
VII	<input type="checkbox"/>	Certain defects in the international application
VIII	<input type="checkbox"/>	Certain observations on the international application

Date of submission of the demand 16 July 2003	Date of completion of the report 27 April 2004
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer RAJEEV DESHMUKH Telephone No. (02) 6283 2145

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the claims, pages , as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the drawings, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 6-14	YES
	Claims 1-5, 15-16	NO
Inventive step (IS)	Claims	YES
	Claims 1-16	NO
Industrial applicability (IA)	Claims 1-16	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)

WO 01/73338 A1 (SGE INTERNATIONAL PTY. LTD.) 4 October 2001—Figures 1-3; page 4, lines 5-18; page 7, lines 21-30
 US 5938919 A (NAJAFABADI) 17 August 1999—Figures 3, 4a-4c; column 4, line 40 - column 9, line 8
 US 5525303 A (FORD et al.) 11 June 1996—Figure 4; column 7, lines 43-60; claim 1
 US 5482628 A (SCHICK) 9 June 1996—Figure 5; column 7, line 50 - column 8, line 12
 US 4989974 A (ANTON et al.) 5 February 1991—Figure 1; column 3, lines 40-68
 US 4586733 A (ANDERSON, JR.) 6 May 1986—Figure 1; column 2, line 52 - column 3, line 31
 US 4083702 A (HARTIGAN et al.) 11 April 1978—Figures 3, 4A-4C; column 3, line 43 - column 4, line 46
 US 4719011 A (SHALON et al.) 12 January 1988—Figures 5, 9, 11; column 7, line 31 - column 8, line 21
 EP 624795 B1 (UPCHURCH SCIENTIFIC, INC.) 7 April 1999—Claims 1-16; figures 3, 5, 6
 US 6102449 A (WELSH) 15 August 2000—Figures 2-3; column 7, lines 33-47
 US 4283280 A (BROWNEE) 11 August 1981—Figures 2-3; column 4, line 9 - column 5, line 60
 Patent Abstracts of Japan, JP 56-150352 A1 (HITACHI CHEM CO LTD et al.) 20 November 1981—Abstract; drawing
 Patent Abstracts of Japan, JP 56-150353 A1 (HITACHI CHEM CO LTD et al.) 20 November 1981—Abstract; drawing

NOVELTY (N), Claims 1-5, 15-16, INVENTIVE STEP (IS), Claims 1-16

Claims 1-5 and 15-16 are not novel because each citation—please see the indications above of the relevant passages and the relevant drawings from each citation—discloses the subject matter of these claims.

In view of the large number of citations, it appears to be well known in the art to construct the separation column, transfer tubing, and end fitting as a sealed integral system. Claims 1-16 do not involve an inventive step because it would be obvious for a person skilled in the art to follow the teachings of any of the citations and to incorporate a double ferrule to achieve an improved seal. Otherwise the claims merely incorporate obvious alternatives that do not make an inventive contribution.